

# Kit 224 Series Installation Instructions for 2-3/8" Metal Posts

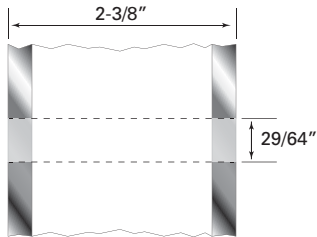
## A: Drill Posts

Hole sizes through intermediate posts  
and/or cable braces are:

5/32" for 1/8" cable

7/32" for 3/16" cable

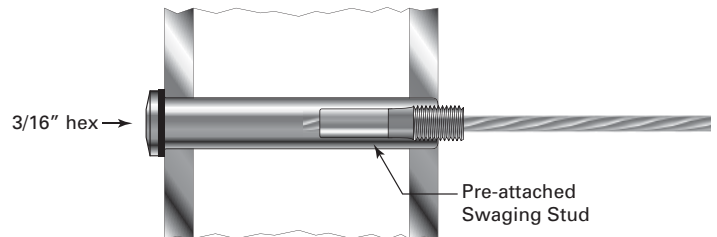
**End posts** are drilled through, using a 29/64" drill bit  
for R-6-72 Receiver and Pull-Lock® fitting.



All holes should be burr-free.

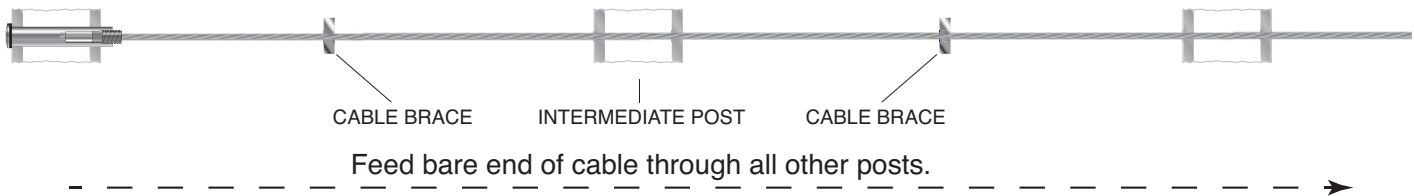
## B. Install Tensioning Terminal

1. Slip the Delrin® washer over the body of the Receiver and insert the Receiver into the post.
2. Start the swaging stud attached to the cable into the Receiver and turn 3 complete turns. This will thread about 1/2 of the stud into the Receiver.



## C. Feed Cable through Intermediate Posts

1. Feed the bare end of the cable through all your intermediate posts and through the end post where you will be installing the Pull-Lock® fitting.



## D: Passing Cable Through A Two-Post Corner Configuration

When passing cable railing through a corner, do not bend the cable past 45° at any time.

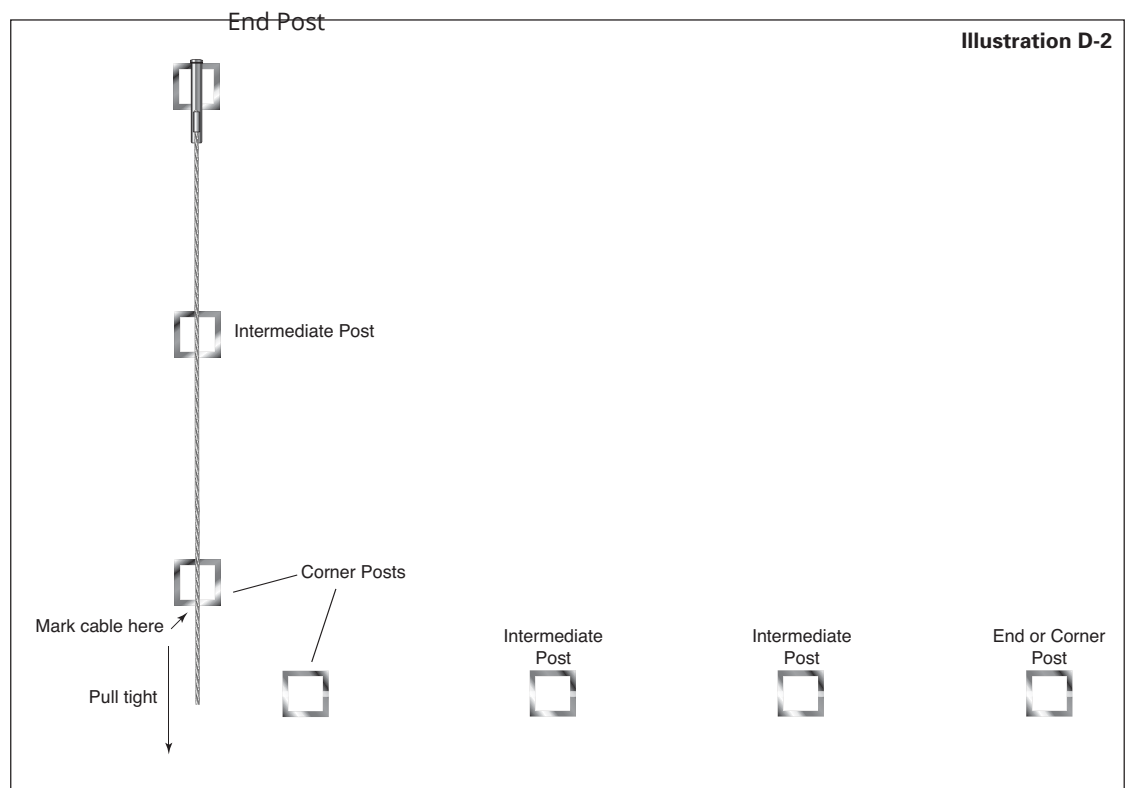
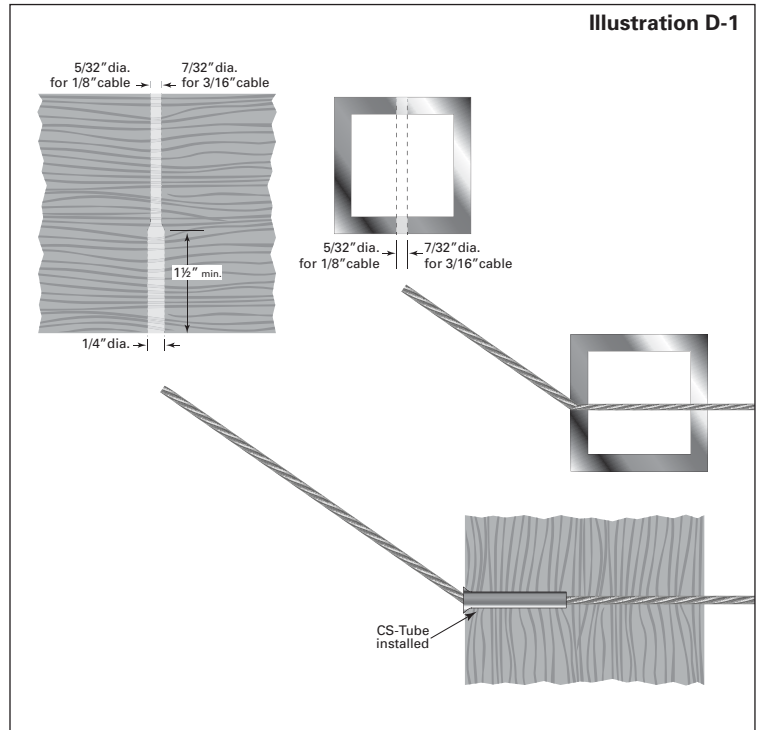
If turning 90°, a 2-step turn using a double corner post configuration is required, as illustrated. For cable runs with up to 90° of turn, kits with single tensioners are sufficient. If going through corners totaling more than 90°, you will want to use a kit with tensioners at both ends.

Corners require two posts because the cable itself, being rigid, will not cooperate in bending cleanly through a single post. When you go through a wood corner post, you will need to prevent the cable from slicing into the wood as it exits the post on an angle by using a Post Protector Tube (aka CS-TUBE).

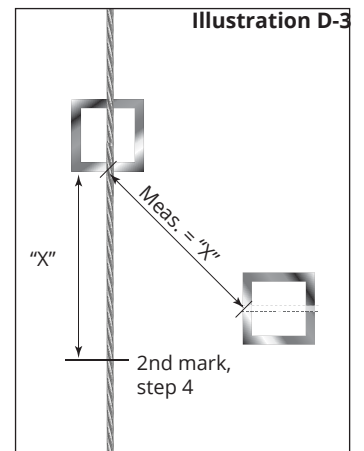
1. For wood posts only, insert a Post Protector Tube (order separately from Accessories) into all wood posts where the cable angles out of the post. Drill 1/4" diameter holes 1-1/2" deep into the face of the post where each cable angles out of the post. Force tube into post so it is flush with post face.  
(Illustration D-1)

2. As you feed the bare end of your cable through your intermediate posts (per Section C in your installation instructions), stop after you feed it through the first of your two corner posts.

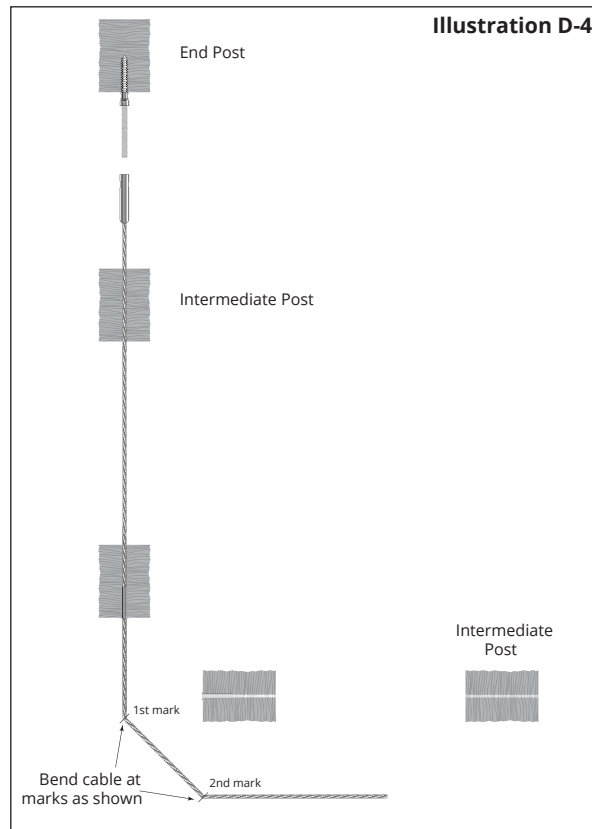
2. Mark the cable at the point where it exits the face of the first post.  
(Illustration D-2)



4. Take a measurement in a straight line between the adjacent posts. Make a second mark on the cable that is the same distance away from the first mark as the measurement that you have just taken. (Illustration D-3)

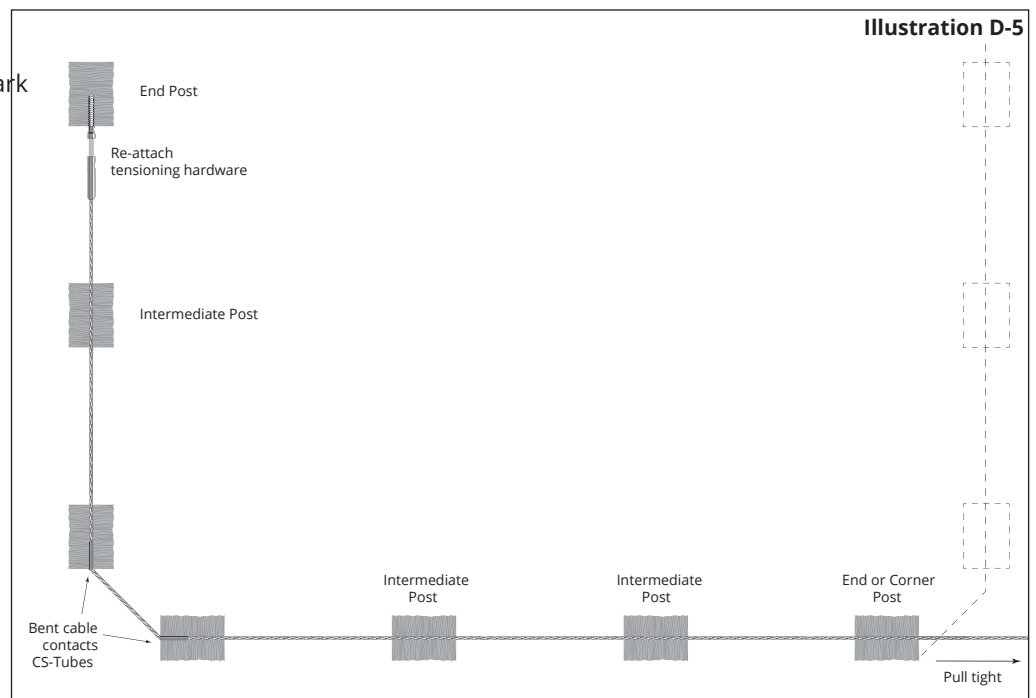


5. Remove the tensioning terminal that was installed in Section B of your kit instructions. (If you used a threaded stud, you will have to remove the fitting and all the cable as well.) This will make it possible to pull the first mark away from the face of the post so that you can access the mark for bending the cable. (Illustration D-4)



6. Bend the cable in both locations that you have marked to approximately 45° (in the same plane). Use a tool such as Ultra-tec Cable Gripping Pliers to help you make "sharp" bends in your cables at the marked locations. (Illustration D-4)

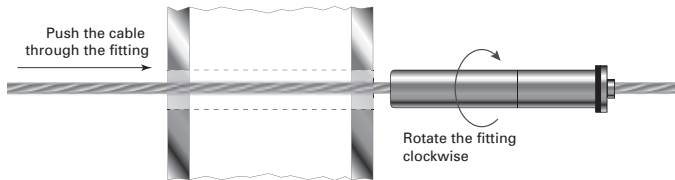
7. Re-attach the tensioning terminal such that the first mark is at the face of the first corner post. Feed the bare end of the cable through the second post and continue to feed the cable through all other intermediate posts and/or another corner section. Pull tight until the second mark contacts the second post. (Illustration D-5)



8. When the bare end of the cable has been passed through all remaining intermediate posts (if another 2-post corner is encountered, repeat Steps 1-7) proceed to Section E of the installation instructions for your kit application.

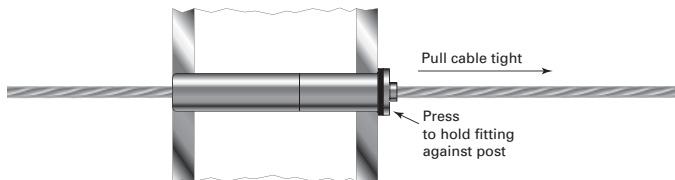
## E. Install Swageless Terminal

1. Slip the Delrin® washer over the body of the Pull-Lock® fitting.
2. Rotate the Pull-Lock® fitting clockwise as you push it onto the cable. If the cable begins to “unravel,” you are rotating the fitting in the wrong direction.

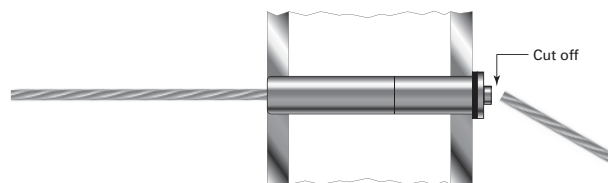


**Note:** If you have trouble inserting the cable into the fitting, it may be because the locking wedges have become stuck. This is not a defect! Here's what you can do to “free the wedges” — For Pull-Lock® or Push-Lock® fittings for 1/8" cable, using either a PL-KEY or 1/4" diameter bolt, insert the PL-KEY or bolt into the hole and press until the wedges move freely. Perform the same operation for a 3/16" Pull-Lock® or Push-Lock®, except use a 16d nail or another tool with 1/8" or smaller diameter. Anything larger than what is recommended can actually get stuck inside the fitting – NOT what you want!

3. Push the Pull-Lock® fitting along the cable and firmly into the hole in your post. While holding the Pull-Lock® fitting against the end post, pull the bare end of the cable to remove as much slack in the cable as possible.

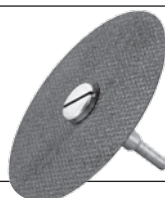


4. Cut the cable flush with the hole in the back of the fitting using a cut-off wheel.

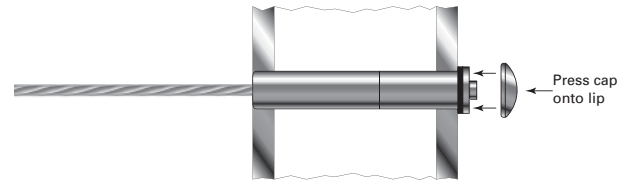


### Cut-off Tool

Used to cut cable flush with the end of the Pull-Lock® fittings, and to cut excess threads off stud-type Receivers. Includes mandrel and two cut-off wheels. Order **CUT-OFF KIT**

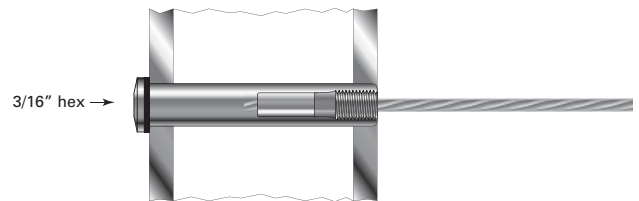


5. Press the cap onto the lip of the Pull-Lock® fitting.



## F. Tension Cables

1. Go to the other end and tension the cable by holding the cable securely to prevent it from turning while you turn the Receiver with a hex wrench. Be careful to protect the cable from damage while tensioning.



The swaging stud will be pulled into the Receiver by rotating the Receiver clockwise.

2. Tension all cables to desired amount in sequence, beginning with the center cables, moving up and down toward the top and bottom. As you tension each cable, give it a sharp pull downward mid-span to help set the wedges, then re-tension as necessary in the same sequence.

